



Edge Server Appliance



Quick Start Guide

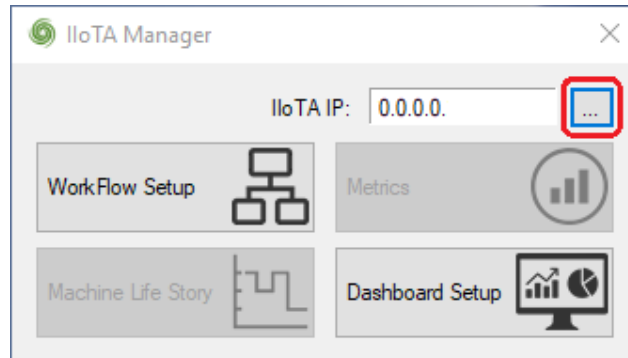
Follow these simple instructions to get your IIoTA up and running as quickly as possible.
Feel free to alter any of these steps to fit your project needs.

Set up Skip Check

Open Work Flow Manager

Open the 'IIoTA Manager.exe' software.

Click the [...] in the upper right corner to find your IIoTA Device.

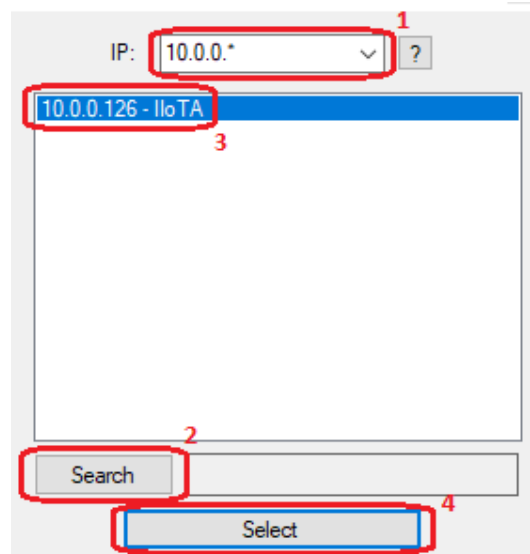


Type your IP Address at the top, use '*' as a wild card if you are not sure of the exact address.

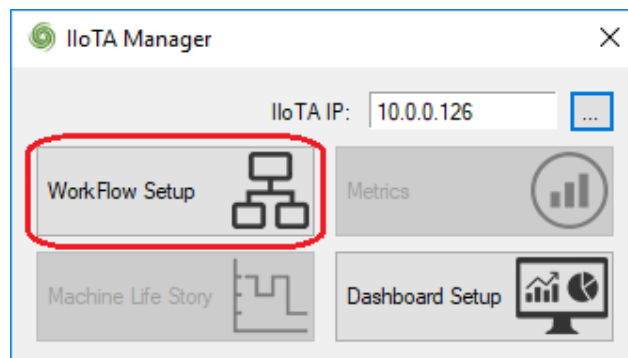
Click [Search].

Highlight your IIoTA Device.

Click [Select] (or double click the IIoTA Device).

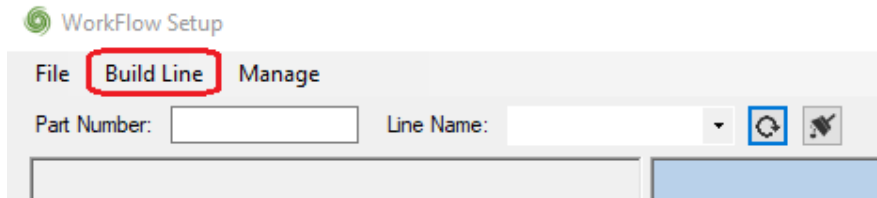


Click [Work Flow Setup].

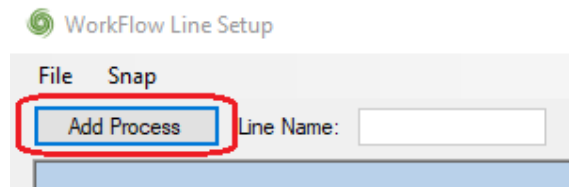


Build Line

Click 'Build Line' from the top menu.

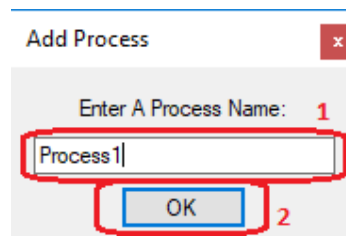


Click [Add Process].

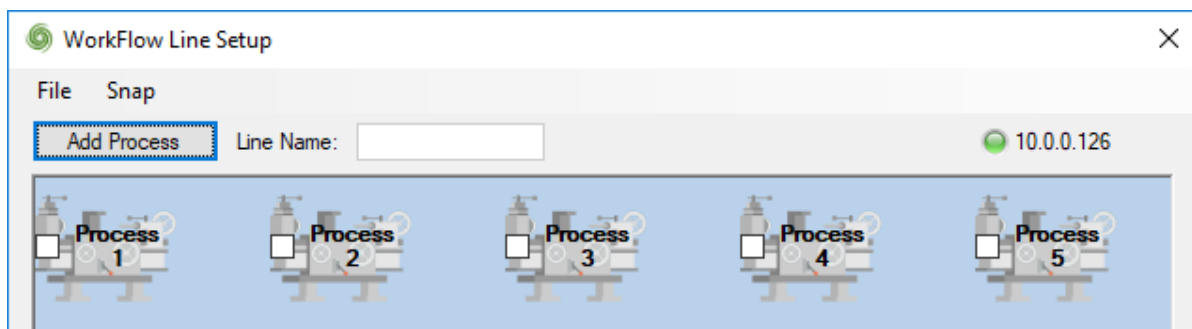


Enter a process name.

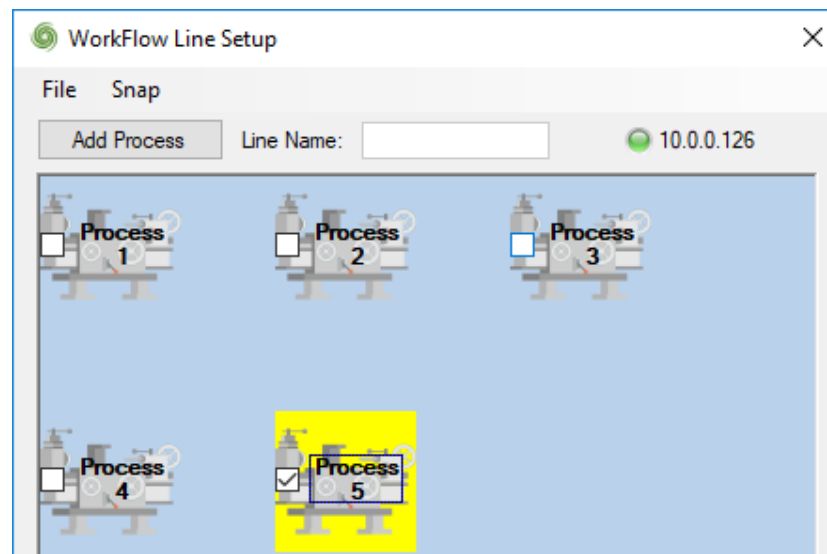
Click [OK].



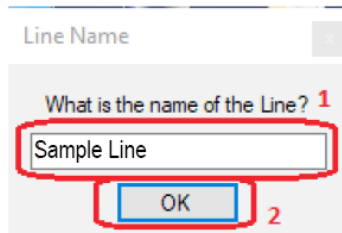
Repeat those steps until you have all the processes you desire.



Use the mouse to drag the processes around to reorder them as desired.

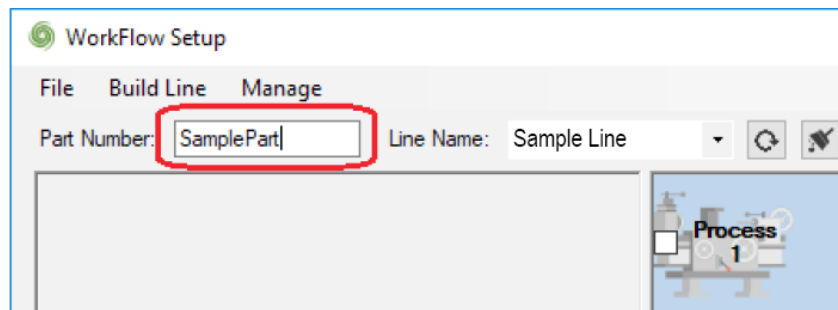


Click 'File > Save Line'.
Enter the Line Name.
Click [OK].

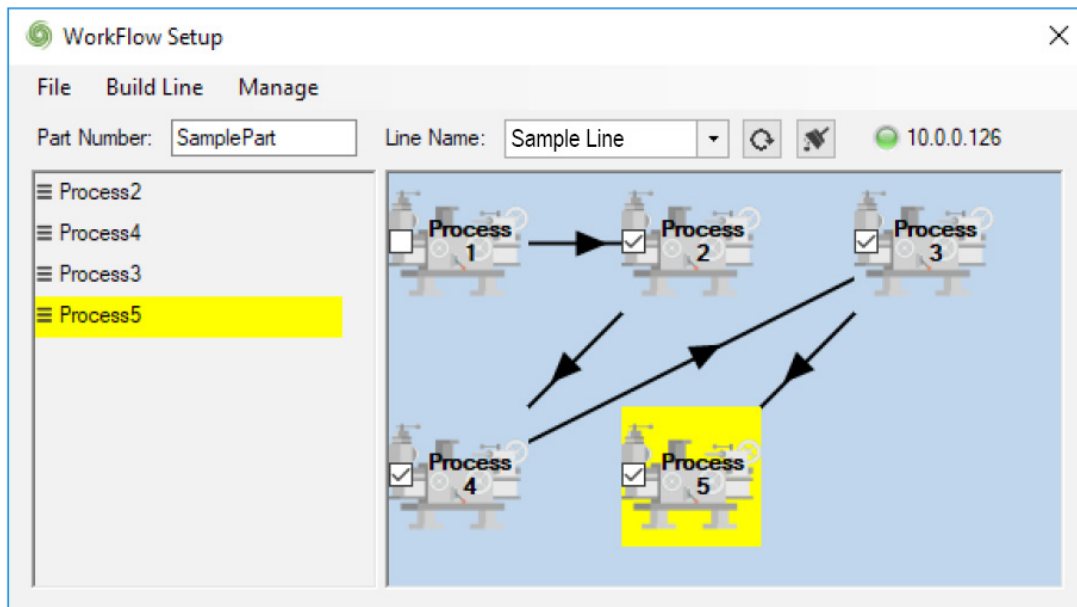


Build Part Flow

Type Part Number at the top.



Click the Processes to build the Parts' Process Flow.



Click 'File > Save' to save the Part Flow.
Repeat for all desired parts on line.

Work Flow Setup is complete.
Continue reading to implement Skip Check.

Integrate into Workbench Project

There are 2 major steps to a skip check process.

Step 1: The 'SkipCheck' Request

This step is implemented before a part is ran at a process.

It checks to see if the part has passed all previous processes and is allowed to run at this process.

It is set up like any other transaction.

The Transport Map must be set to 'SkipCheck'.

Input:

'PUID' is the unique Serial Number.

'PPROCESSNAME' is the name of the Current Process.

'PPARTNUMBER' is the Part Number.

Output:

'out_STATUS' returns 1 if the part passed the 'SkipCheck' Request and 0 otherwise.

'out_MESSAGE' returns '0,OK' if the part passed the 'SkipCheck' Request, and an error otherwise.

The screenshot shows the 'Trigger' configuration window for 'TST-PLC_LOAD_EVENT_STN1'. The 'Event' tab is selected, showing the trigger event type as 'Data'. The variable name is 'TST-CMP_PLCS.T1_PLMS[5]/0', the variable type is 'BOOL', and the condition is 'Equal to' with a value of '1'. The priority is set to 500 ms. The 'On Edge' checkbox is unchecked. The 'Deadband Range' is set to 0. The 'Actions' list on the left includes: 1. Set: LocalVariables.LV_PART_NUMBER, 2. Set: LocalVariables.LV_SERIAL_NUMBER, 3. Set: LocalVariables.LV_PCB_NUMBER, 4. Transaction: SkipCheck (highlighted), 6. String Compare: LocalVariables.PLMS, and 8. Set: AB PLC.S1_PLMS_LOAD_STATUS. The '4.Transaction' configuration is shown on the right, with the transport map set to 'SkipCheck' and 'Use LUW' set to 'False'. The 'Input' tab is selected, showing a table of input variables:

Name	Logical	Count	Value	Type
col_PUID	STRING(32)	1	LocalVariables.LV_SERIAL_NU...	STRING(20)
col_PPROCESSNAME	STRING(50)	1	TFT	CONSTANT
col_PPARTNUMBER	STRING(50)	1	LocalVariables.LV_PART_NUM...	STRING(10)

Step 2: The 'StoreResults'

This step is implemented after a part has ran at a station.

It stores the results of the process, so further 'SkipChecks' can check against it.

It is set up like any other transaction.

The Transport Map must be set to 'StoreResults'.

Input:

'PPROCESSNAME' is the name of the Current Process.

'PPARTNUMBER' is the Part Number.

'PMACHINENAME' is the Machine Name at this station.

'PUIDS' is the unique Serial Number.

'PPASSED' is a weather the part passed this process or not.

'PRELTS' is a spare field for entering any results data that may be desired.

'PLINENAME' is the name of the Line this process is on.

Output:

'out_STATUS' returns 1 if the 'StoreResults' worked and 0 otherwise.

'out_MESSAGE' returns '0,OK' if the 'StoreResults' worked, and an error otherwise.

Trigger: IloTA.IIOTA_Test.TST-PLC_UNLOAD_EVENT_ST1

Name: TST-PLC_UNLOAD_EVENT_ST1

Event Local Variables Static Variables Settings Details

Trigger Event Type: Data

Variable Name: TST-CMP_PLC.ST1_PLMS[5]/1 Priority (ms): 500

Variable Type: BOOL

Condition: Equal to

Value: 1

Tolerance Range: On Edge: ☐

Deadband Range:

Actions

- 4. String Builder: LocalVariables.STRING
- 5. String Builder: LocalVariables.STRING
- 6. String Builder: LocalVariables.OUTPUT
- 13. Transaction: StoreResults
- 15. Execute SubTrigger: StoreResults_F
- 8. String Compare: LocalVariables.PLMS

Transport map: StoreResults

Use LUW: False

Input Output Routing Details

Name	Logical	Count	Value	Type
col_PPROCESSNAME	STRING(50)	1	TFT	CONSTANT
col_PPARTNUMBER	STRING(50)	1	LocalVariables.LV_Part_Nu...	STRING(10)
col_PMACHINENAME	STRING(50)	1	TST-CMP_PLC	CONSTANT
col_PUIDS	STRING(200)	1	LocalVariables.LV_Serial_N...	STRING(43)
col_PPASSED	INT2	1	TST-CMP_PLC.ST1_PLMS[6]	INT4
col_PRELTS	STRING(8000)	1	LocalVariables.OUTPUT	STRING(500)
col_PLINENAME	STRING(50)	1	FA21	CONSTANT

Save Validate Search Close



IloTA™

Edge Server Appliance

Resetting the IloTA™ unit allows the user to return the IP address assignments to the factory settings without compromising existing programs and settings:

1. Power OFF the IloTA™
2. Fully press and HOLD the RESET button
3. Press and RELEASE the POWER button.
Ensure the **red** POWER indicator remains illuminated.
4. Continue HOLDING the RESET button for 25 seconds
5. Release RESET button - the IP addresses will be reset to:
ETH0: 192.168.1.68 / 255.255.255.0
ETH1: 10.10.10.10 / 255.255.255.0

IloTA™ resources are available at www.IloTA.net.

Technical Support: +1 (865) 409-1555